

What is claimed is:

1. An imaging device comprising:

an imaging element, wherein a plurality of pixels are arranged in a plurality of lines, which is capable of reading out imaging signals captured by means of said pixels, line by line;

light exposure controlling means for alternately repeating steps of exposure and non-exposure of said imaging element to light;

driving means for driving said imaging element in such a manner that an imaging signal is output for the pixels in each line of one of either the odd-numbered lines or the even-numbered lines, from the pixels in said plurality of lines, for a prescribed time period after said exposure, whereupon an imaging signal is output for the pixels in each line of the other of either the odd-numbered lines or the even-numbered lines, before the subsequent exposure;

first storing means for storing an imaging signal for each of said one group of lines;

second storing means for storing an imaging signal for each of said other group of lines; and

sequential scanning means for obtaining a sequential scan imaging signal by repeatedly reading out the imaging signal for each line stored in said first storing means and the imaging signal for each line stored

in said second storing means, in alternating sequence.

2. An imaging device comprising:

an imaging element for capturing colour images, wherein a plurality of pixels are arranged in a plurality of lines and a plurality of colour filters for pixel binning are positioned in units of said pixels, which is capable of reading out imaging signals captured by means of said pixels, line by line;

light exposure controlling means for alternately repeating steps of exposure and non-exposure of said imaging element to light;

driving means for driving said imaging element in such a manner that an imaging signal is output for the pixels in each line of one of either the odd-numbered lines or the even-numbered lines, from the pixels in said plurality of lines, for a prescribed time period after said exposure, whereupon an imaging signal is output for the pixels in each line of the other of either the odd-numbered lines or the even-numbered lines, before the subsequent exposure;

first storing means for storing an imaging signal for each of said one set of lines;

second storing means for storing an imaging signal for each of said other set of lines; and

sequential scanning means for obtaining a sequential scan imaging signal by repeatedly using, in

alternating sequence, a pixel-binned signal for a first binning line, wherein the imaging signal for the pixels of each even-numbered line is combined with the imaging signal for the pixels of each subsequent odd-numbered line which correspond to the pixels of said even-numbered line, and a pixel-binned signal for a second binning line, wherein the imaging signal for the pixels of each odd-numbered line is combined with the imaging signal for the pixels of each subsequent even-numbered line which correspond to the pixels of said odd-numbered line.

3. The imaging device according to claim 1 or claim 2, further comprising outline enhancement processing means for implementing outline enhancement processing on the basis of said sequential scan imaging signal.

4. The imaging device according to claim 1 or claim 2, further comprising enlargement and reduction processing means for implementing enlargement and reduction processing of the image on the basis of said sequential scan imaging signal.

5. The imaging device according to ^{claim 1 or claim 2} ~~any one of claims 1 to 4~~, further comprising scan converting means for generating a sequential scan image signal for a personal computer interface, or the like, or an interlaced scan image signal for a TV system, or the like, on the basis of said sequential scan imaging signal.